



OmniAir Consortium
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Alexandria, VA 22309-5252

April 9, 2014

FILED ELECTRONICALLY

Marlene H. Dortch
Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

RE: Notice of Ex Parte Meeting: Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band, ET Docket No. 13-49

Dear Ms. Dortch:

Pursuant to Section 1.1206(b) of the Commission's Rules (47 C.F.R. § 1.1206(b)), notice is hereby provided in the above-referenced docket regarding an *ex parte* meeting on April 8, 2014 OmniAir Consortium "OmniAir" members and staff of the Office of Engineering & Technology and Wireless Telecommunications Bureau. An electronic copy of this notice is being filed for inclusion in the above-referenced docket.

Attending on behalf of OmniAir were David Kristick, Chair of OmniAir; Suzanne Murtha, Executive Director, OmniAir; Jason JonMichael, HNTB; Stephen Novosad, Atkins; Richard Schnacke, Transcore; James Hofmann, North Texas Tolling Authority; and Richard Doehring, Transcore.

Attending on behalf of the Commission were: Julius Knapp, Chief Engineer, OET; Aole Wilkins, Office of Engineering and Technology; Michael Ha, Deputy Chief, Policy and Rules Division; Karen Rackley, Technical Rules Branch Chief; and Geraldine Matise, Deputy Chief, Legal.

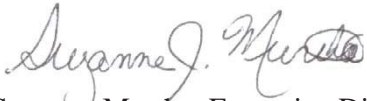
The participants discussed OmniAir's members concerns regarding the Commission's proposal to permit unlicensed operations in the 5850-5925 GHz Band ("5.9 GHz Band"). The OmniAir team asked questions regarding the status of the FCC NPRM on the the 5.9 GHz Band and also voiced our concerns about the availability of the band to execute many applications required by our members including safety and mobility applications. OmniAir would prefer to see that full consideration of transportation requirements would be considered, and no hasty decisions made.

Both Vehicle to Vehicle and Vehicle to Infrastructure applications were discussed, with various ways for the traffic engineers to implement the applications.

OmniAir also left the below included documents.

If there are any questions regarding this notice, please contact the undersigned.

Sincerely,

A handwritten signature in cursive script, reading "Suzanne J. Murtha". The signature is written in dark ink and is positioned above the printed name.

Suzanne Murtha, Executive Director, OmniAir

cc: (via email)

- ☐ Julius Knapp
- ☐ Aole Wilkins
- ☐ Michael Ha
- ☐ Karen Rackley
- ☐ Geraldine Matisse



Existing Connected Vehicle Deployments

1. NY City – Roughly 20 road side units are installed around the Jacob Javits Center in Manhattan and are currently being used for urban applications.
2. Long Island, NY – Roughly 20 roadside units are installed along the Long Island Expressway and are currently being used by New York State DOT for their traffic management center.
3. New York State - DOT and FMCSA awarded Kapsch, Volvo and several other project members funding to develop and verify eScreening application for commercial vehicles. eScreening uses commercial grade 5.9 GHz DSRC to perform verification of vehicle and driver credentials and validate commercial vehicle compliance with the federal and state administered credentialing systems. This project has advanced usage of 5.9GHz DSRC and communication standards to support needs of the commercial vehicle operators and state authorities.
4. VA DOT installation on 495 and 66 – Located in Fairfax County, this deployment is equipped with 44 Roadside Units. The Test Bed area encompasses portions of I-66, I-495, Route 29, Route 50, two metro stations, a fire department, a hospital, and a good mix of residential, educational and commercial areas. The vehicles in the related fleet are equipped with automation systems ranging from Levels one through three as well as VTTI Data Acquisition Systems and DSRC on-board units. The fleet currently consists of six light vehicles, two motorcycles, one Tractor-trailer and one motor coach.
5. Florida installation – In the Orlando area, FDOT has deployed 26 roadside units around the Orange County Convention Center. These RSU will interface with onboard equipment (OBE) and connect to the FDOT District Five SunGuide® advanced transportation management system production software through the District's fiber optic network.
6. Lee County, Florida - Kapsch TrafficCom has worked closely with Lee County, Florida's Lee Way (electronic toll collection system) to develop and host North America's first fully integrated 5.9 GHz DSRC open road tolling system with vehicle enforcement. The customized tolling system was mounted on the first west-bound toll gantry at the Midpoint toll plaza in Cape Coral, Florida and covers two west-bound travel lanes, as well as two shoulders. It includes a high-performance automatic license plate recognition system using both infrared and white light cameras for each lane, as well as a laser vehicle classification system based on FHWA's axle estimation Scheme F. Three overview cameras provide a high-resolution color reference image. The dedicated 5.9 GHz DSRC transceivers provide a variety of service options in addition to toll transactions. A fleet of voluntary users provide daily 5.9 GHz DSRC transactions for system testing and tuning.

7. Novi Test Bed - Located in Novi, Michigan and opened in 2010, this deployment is specifically designed to support DSRC testing in the 5.9 GHz Band. This deployment covers 45 square miles, comprising 75 center-line miles consisting of 32 interstate and divided highway and 43 arterial miles, and covering signalized and un-signalized intersections. In addition, there are 50 DSRC roadside units installed along the network.
8. Safety Pilot installation - US DOT's Connected Vehicle program, in conjunction with its partners, conducted a Safety Pilot Program to examine connected vehicle technologies and real-world applications. This premier deployment of connected vehicles was deployed around University of Michigan Transportation Institute and includes providing equipment to send and receive data along 73 lane-miles of roadway in the northeast Ann Arbor area. The primary routes covered include U.S. 23, M-14, Plymouth Road, Washtenaw Avenue, and the Fuller/Geddes corridor. According to the Safety Pilot webpage, these routes were selected to capture the majority of test participant drivers during their daily commutes. The mix of freeways and city streets will allow researchers to evaluate the effectiveness of the technology on different road types and driving conditions. The equipment is installed at routes along 21 signalized intersections, 3 curve locations, and 5 freeway sites.
9. PrePass Pilot I-70 Corridor - Kapsch, in collaboration with Help Inc., and Xerox, built an e-screening Pilot Corridor with the objective of demonstrating the power of automated e-screening utilizing 5.9 GHz DSRC. (HELP's current preclearance system uses Kapsch supplied 915MHz transponders and includes over 420,000 enrolled trucks with preclearance capability at over 300 weigh stations in 31 states across the U.S.). Help Inc. has recruited a number of industry leading commercial vehicle carriers to participate in the pilot and has outfit over 50 trucks to date. At the roadside are six inspection stations equipped with RSE in the I-70 corridor. Drivers log onto the system with an NFC based smartcard. As they near a 5.9 equipped weigh station, carrier and driver data are downloaded to the PrePass database. A clearance decision is then made based on this data and sent to the transponder in the vehicle where the driver sees a green light (bypass) or redlight (pull-in). Carrier credential data and the weight results are also uploaded to the device for later interrogation by enforcement officials in the field. The goal of the project is to work towards a paperless credential system in the U.S. where all data is stored digitally on the truck with no need for binders full of credentials.
10. Commercial Vehicle Technology - Michigan DOT (MDOT) is installing a truck parking connected-vehicle system at five sites along the I-94 corridor in Michigan. The solution consists of a 5.9 GHz Dedicated Short Range Communications (DSRC) in-vehicle unit and roadside equipment with customized application software that together provide drivers with real-time truck parking availability information from MDOT facilities and private truck stops.
11. Northern California installations in Palo Alto are equipped to work with the automobile manufacturers and researchers located in that region.
12. Arizona DOT has erected a series of 5.9 GHz installations focused on improving flow of emergency vehicles and ramp metering.

13. San Francisco Airport landside applications – in 2013, SFO is planning to install a 5.9 GHz based system to enhance its throughput of taxis and to improve the accuracy of distance based fare charging to the taxi systems. The system is designed to be extended to Oakland and San Jose airports.
14. Oak Ridge, TN – Oak Ridge National Laboratories has deployed an Enterprise Network Operations Center Services Delivery Node in support of research and analysis associated with transportation-related DSRC.
15. Hood River Bridge – At the Port of Hood River Kapsch manages the toll plaza operations for vehicles north bound from the Oregon side to Washington State. The toll plaza processes around 12,000 vehicles per day. There are approximately two hundred 5.9 GHz DSRC transponders currently in circulation in and around the Hood River Bridge to provide test data for the system. As part of an agreement between Kapsch TrafficCom and the Port of Hood River Kapsch has installed and continues to test and support the operation of 5.9 GHz DSRC transponder and Automated Vehicle Identification (AVI) system. Kapsch recently demonstrated the functionality of the system, and thousands of 5.9 GHz based tolling transactions were processed over the course of the event and the multi-application power of 5.9 GHz was observed by hundreds of guests including dignitaries such as Secretary of Transportation, Ray LaHood.
16. Pittsburgh - Carnegie Mellon University has worked with both Cranberry Township and areas of the city to deploy DSRC units. The Cranberry Township deployment has 11 DSRC units and is planning to add more. The urban deployment has at least 20 units focused on urban network applications such as pedestrian and bicycle multi-modal. CMU is planning to add 23 more on the adaptive corridor close to CMU for automated and connected vehicle testing.

OmniAir Consortium & OmniAir Certification Services (OCS)



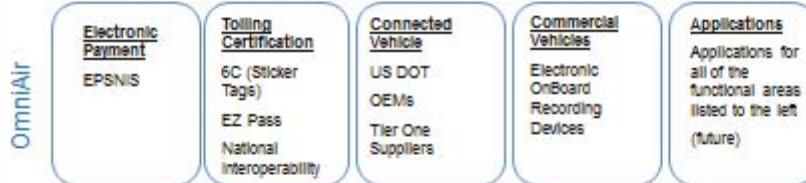
Members

Vendors: Kapsch TrafficCom, Raytheon, 3M, Transcore, Xerox, GeoToll

Public Sector: IAG, E470, MTA, Consultants: HNTB, SwRI, Atkins

Testing Organizations: MetLeos, CTC, TUV Rheinland, VTI

OmniAir Supports the Following Areas



OCS

OmniAir Certification Services

(independent certification body supporting OmniAir and Others)

Testing and public Agencies ONLY: MetLeos, CTC, TUV Rheinland, NY State Thruway, WS DOT

